

LISTING OF CLAIMS

The following listing of claims replaces all previous listings and versions of claims in this application.

Listing of Claims:

Claims 1-8 (canceled)

Claim 9 (previously presented): A method of generating end terminations along a fastener for allowing the opening and closing of recloseable bags, comprising:

providing said fastener with first and second tracks, said first track including a first profile, said second track including a second profile being interlocked with said first profile; and

cutting said fastener with a laser beam to divide said fastener into segments associated with respective ones of the recloseable bags, each segment of said fastener having opposing ends and said first and second profiles remaining interlocked between said opposing ends during said cutting.

Claim 10 (original): The method of claim 9, further including sealing said first profile to said second profile with said laser beam.

Claim 11 (original): The method of claim 10, wherein said cutting and said sealing occur simultaneously.

Claim 12 (canceled)

Claim 13 (previously presented): A method of creating a plurality of recloseable bags from a web of material, comprising:

providing said web of material including a fastener attached to said web, said fastener allowing said bags to be recloseable and including first and second interlocking members;

while said first and second interlocker members remain interlocked, cutting said fastener at spaced locations corresponding to the ends of said plurality of recloseable bags; and

cutting said web of material with a laser adjacent to said spaced locations to form said plurality of recloseable bags.

Claim 14 (original): The method of claim. 13, wherein said step of cutting said fastener includes cutting with a laser.

Claim 15 (original): The method of claim 14, wherein said step of cutting said fastener with said laser includes the step of simultaneously sealing said fastener.

Claim. 16 (original): The method of claim 15, wherein said laser for cutting said web is different from said laser cutting said fastener.

Claim 17 (original): The method of claim 13, wherein said step of cutting said web includes the step of simultaneously sealing said web.

Claim 18 (original): The method of claim 13, further including moving said web along a rotatable drum during said step of cutting said web.

Claim 19 (original): The method of claim 18, wherein said step of cutting said web includes translating a laser beam from said laser.

Claim 20 (original): The method of claim 19, wherein said step of translating is performed within said rotatable drum.

Claim 21 (original): The method of claim 18, wherein said step of cutting said fastener includes cutting said fastener with a laser while said web is on said rotatable drum.

Claim 22 (original): The method of claim 18, further including holding said web against said rotatable drum.

Claim 23 (original): The method of claim 22, wherein said step of holding includes suctioning said web against said rotatable drum.

Claim 24 (original): The method of claim 18, wherein said laser is located outside of an interior of said drum and a laser beam from said laser projects inwardly into said interior and then radially outward from said interior of said drum.

Claim 25 (previously presented): A method of creating a plurality of recloseable bags from a web of material, comprising,

providing said web of material including a fastener attached to said web, said fastener

including first and second interlocking members;

operating a laser to seal said fastener at ends of said plurality of recloseable bags while

said first and second interlocked members remain interlocked between said ends;

and

operating said laser to seal side edges of said plurality of recloseable bags.

Claim 26 (original): The method of claim 25, wherein said two operating steps occur simultaneously.

Claim 27 (original): The method of claim 25, wherein said two operating steps also include cutting said fastener and cutting said web of material to form said side edges.

Claim 28 (original): The method of claim 25, wherein said laser is a CO₂ laser.

Claim 29 (original): The method of claim 25, wherein said web is moving on a rotating drum during said operating steps.

Claim 30 (previously presented): A method for cutting a web of polymeric material into individual bags, comprising:

advancing said flexible material toward a power-driven rotatable drum;

apply power to said power-driven rotatable drum;

engaging said rotatable drum with said web;
suctioning said flexible material web against said rotatable drum while said rotatable drum is rotating; and
cutting said web with a laser beam projecting from the interior of said rotatable drum through slots in said rotatable drum, said slots extending transversely across said rotatable drum in a direction generally parallel to a central axis of said rotatable drum, said cutting producing said individual bags.

Claims 31-34 (canceled)

Claim 35 (previously presented): The method of claim 30, further including the step of collecting said individual bags after said step of cutting.

Claim 36 (original): The method of claim 30, wherein said step of cutting includes the step of guiding said laser beam with a galvanometer-driven optic.

Claim 37 (original): The method of claim 30, wherein said step of cutting includes the step of guiding said laser beam with a steering mirror.

Claim 38 (previously presented): The method of claim 30, wherein said web is generally non-opaque to said laser beam and said cutting includes engaging opaque material on said web with said laser beam.

Claim 39 (original): The method of claim 30, wherein said laser is a CO₂ laser.

Claim 40 (currently amended): The method of cutting flexible material into segments,
comprising:

suctioning said flexible material against a power-driven rotatable drum, said rotatable
drum including slots spaced apart by a distance corresponding to a length of said
segments;
applying power to said power-driven rotatable drum; and
cutting said flexible material with a laser beam projected from an inside region of said
drum into said slots.

Claim 41 (original): The method of claim 40, wherein said segments remain suctioned
against said rotatable drum after said step of cutting.

Claim 42 (original): The method of claim 40, wherein said cutting includes translating
said laser beam across said slots.

Claim 43 (original): The method of claim 40, wherein said rotatable drum has a
central axis and said laser beam projects along a radial direction with respect to said
central axis, said step of cutting includes rotating said drum at a constant speed and
initiating said laser beam when one of said slots is aligned along said radial direction.

Claim 44 (original): The method of claim 40, wherein said flexible material is a polymeric material.

Claim 45 (original): The method of claim 44, wherein said polymeric material is a web of material.

Claim 46 (original): The method of claim 45, wherein said segments are bags created from said web of material.

Claim 47 (original): The method of claim 40, wherein said step of cutting includes the step of guiding said laser beam with a galvanometer-driven optic.

Claim 48 (original): The method of claim 40, wherein said flexible material is generally non-opaque to said laser beam and said cutting includes engaging opaque material on said flexible material with said laser beam.

Claim 49 (original): The method of claim 40, wherein said laser beam is from a CO₂ laser.

Claim 50 (previously presented): A method of cutting a flexible material into segments, comprising:

suctioning said flexible material to an outer surface of a drum having a plurality of slots extending from said outer surface to an inner surface of said rotatable drum;

directing a laser beam from within said rotatable drum outwardly toward said inner surface; and

rotating said rotatable drum with a motor coupled to said rotatable drum such that said laser beam sequentially passes through said plurality of slots to cut said flexible material and form said segments.

Claim 51 (previously presented): The method of claim 50, wherein said step of directing said laser beam comprises directing the beam in a radial direction with respect to a central axis of said drum.

Claim 52 (previously presented): The method of claim 50, wherein said step of directing said laser beam includes projecting said laser beam only when said laser beam is aligned with one of said plurality of slots so as to result in an intermittent operation of said laser beam.

Claim 53 (canceled).

Claim 54 (previously presented): The method of claim 50, wherein said step of directing said laser beam includes guiding said laser beam with a galvanometer-driven optic.

Claim 55 (previously presented): The method of claim 50, wherein said flexible material is generally non-opaque to said laser beam and wherein said cutting the material comprises engaging opaque material on said flexible material with said laser beam.

Claim 56 (previously presented): The method of claim 50, forming said flexible material from a polymeric material.

Claim 57 (previously presented): The method of claim 56, forming said polymeric material as a web of material.

Claim 58 (original): The method of claim 57, wherein said segments are bags created from said web of material.

Claim 59 (previously presented): The method of claim 50, comprising forming the laser beam from a CO₂ laser.

Claim 60 (currently amended): A method of creating end terminations on a two-part fastener attached to a web of material for producing a plurality of bags, comprising:

holding said web of material relative to an outer surface of a rotatable drum with said

two-part interlocking fastener positioned at a known location; and

fusing both parts of said two-part fastener with a laser beam while said two-part

interlocking fastener remains interlocked.

Claim 61 (original): The method of claim 60, wherein said step of holding includes suctioning said web of material against said outer surface.

Claim 62 (original): The method of claim 60, wherein said step of fusing includes projecting said laser beam from an interior of said rotatable drum.

Claim 63 (original): The method of claim 62, wherein said step of projecting includes guiding said laser beam through a slot in said rotatable drum.

Claim 64 (original): The method of claim 60, wherein said fastener includes an end termination component at spaced locations along said fastener, said step of fusing includes fusing said material from said end terminations components to both parts of said two-part fastener.

Claim 65 (previously presented): The method of claim 60, wherein said step of fusing includes a step of guiding said laser beam with a galvanometer-driven optic.

Claim 66 (currently amended): The method of claim 60, further including holding a second web of material against a second drum and fusing a two-part fastener on said second web of material with a second laser beam, said laser beam for said second drum and said laser beam of said first drum being derived from the same laser.

Claim 67 (original): The method of claim 60, wherein said laser beam is from a CO₂ laser.

Claim 68 (original): The method of claim 60, wherein said holding included registering said two-part fastener within a circumferential groove in said drum.

Claim 69 (original): The method of claim. 60, further including cutting said fastener at said end termination.

Claims 70-116 (canceled)

Claim 117 (withdrawn): A method of forming a fastener for a bag, comprising:
providing said fastener with first and second tracks, said first track including a first profile, said second track including a second profile for interlocking with said first profile;
aligning a mold across said fastener; and
while said mold is aligned across said fastener, sealing said first and second tracks to create a notch in said fastener without contacting said tracks with the device that performs the sealing said notch being defined by two separated ends of said fastener at which said first and second profiles are sealed; said notch having a length dimension being defined by said mold.

Claim 118 (withdrawn): The method of claim 117, wherein said device is a laser.

Claim 119 (withdrawn): A fastener formed by the method of claim 9.

Claim 120 (withdrawn): A plurality of reclosable bags formed by the method of claim 13.

Claim 121 (withdrawn): A plurality of reclosable bags formed by the method of claim 25.

Claim 122 (previously presented): A method of forming a fastener for reclosable packages, the method comprising:

forming ends of first and second tracks comprising corresponding interlocking profiles,

wherein the forming is by a device that does not contact the first and second tracks; and

sealing the ends of the first and second tracks with surface tension while the interlocking profiles remain interlocked.

Claim 123 (previously presented): The method of Claim 122, comprising allowing the ends to form smooth and rounded surfaces upon sealing.

Claims 124 -130 (canceled)

Claim 131 (withdrawn): A method of forming a fastener for a reclosable package, the method comprising:

providing a first track including a first profile;

providing a second track including a second profile for interlocking with the first profile;

aligning a mold across the fastener; and

while the mold is aligned across the fastener, sealing the first and second tracks to create

a notch in the fastener with a laser, the notch being defined by two separated ends of the seale

Claim 132 (withdrawn): A method of forming a fastener for a reclosable package, the method comprising:

providing a first track including a first profile;

providing a second track including a second profile for interlocking with the first profile;

aligning a mold across the fastener; and

while the mold is aligned across the fastener, cutting a notch in the first and second track

with a laser, the notch being defined by two ends of said first and second tracks

formed primarily by surface tension, a length dimension of the notch being

defined by the mold.

Claim 133 (previously presented): A method of creating a plurality of reclosable bags from a web of material, comprising:

providing said web of material including a fastener attached to said web, said fastener

allowing said bags to be recloseable;

cutting said fastener with a first laser at spaced locations corresponding to the ends of said plurality of recloseable bags, said cutting said fastener with said first laser including simultaneously sealing said fastener; and

cutting said web of material with a second laser adjacent to said spaced locations to form said plurality of recloseable bags, said second laser being different from said first laser.

Claim 134 (Currently Amended): A method of creating end terminations on a two-part fastener attached to a web of material for producing a plurality of bags, comprising:

holding said web of material relative to an outer surface of a rotatable drum with said two-part fastener positioned at a known location;

fusing both parts of said two-part fastener with a laser beam; and

holding a second web of material against a second drum and fusing a two-part fastener on said second web of material with a second laser beam, said laser beam for said second drum and said laser beam of said drum being derived from the same laser.